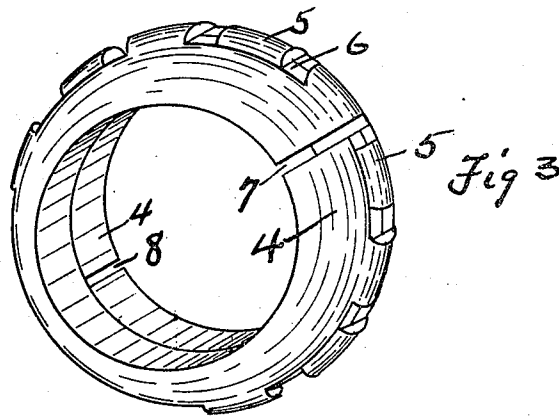
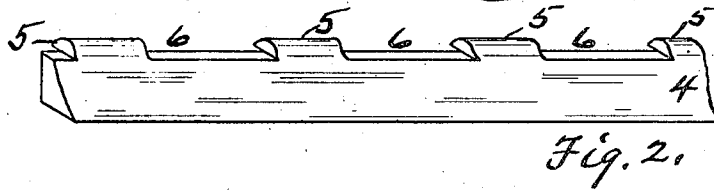
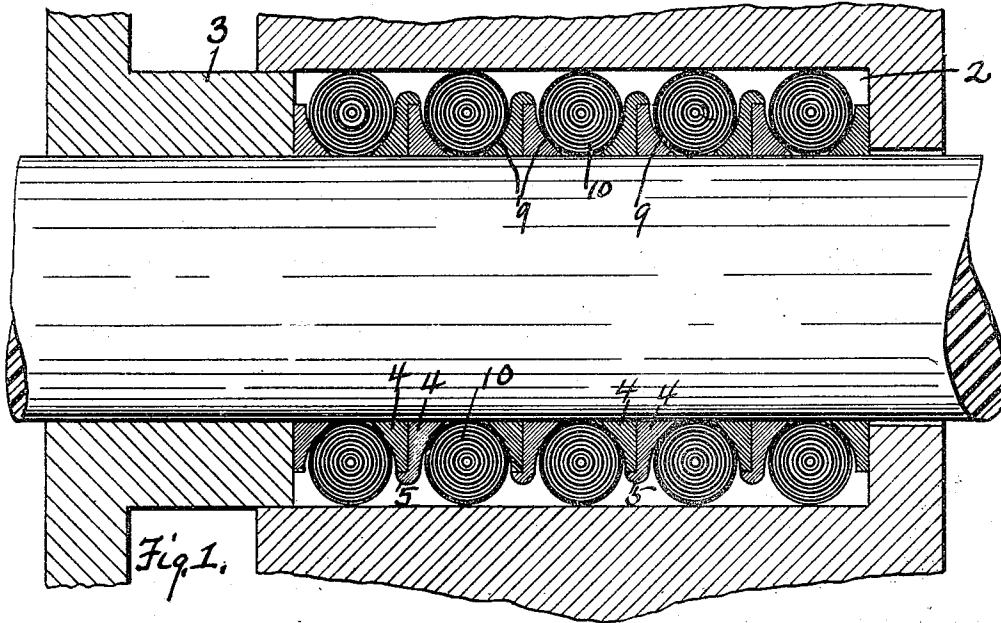


E. J. ARMSTRONG.
 ROD PACKING.
 APPLICATION FILED MAY 20, 1909.

946,001.

Patented Jan. 11, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN J. ARMSTRONG, OF ERIE, PENNSYLVANIA.

ROD-PACKING.

948,001

Specification of Letters Patent. Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, EDWIN J. ARMSTRONG, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Rod-Packing, of which the following is a specification.

The invention relates to rod packing and consists in certain improvements in the construction thereof as will be hereinafter fully described and pointed out in the claims.

In carrying out my invention I form the packing of alternate rings of metal and elastic material. The metal rings relieve the rod of the friction usually present where elastic packing is used and also reduces the wear on the rod. The elastic packing, on the other hand, assures a tight joint and the taking up of any inequalities either in the stuffing box or on the rod. I preferably form the metal rings of two halves, each forming practically a complete ring in itself. Ordinarily I propose to form soft malleable bars of metal of triangular shape in the cross section and of indefinite length. This bar is cut as needed so as to form the packing rings, each half of the ring being formed by a portion of the bar, and these halves being arranged side by side, form a completed ring of triangular shape in cross section and with the joints broken. I prefer also to add to these portions of the completed ring an interlocking feature so that two halves cannot rotate relatively to each other so as to bring the joints into register.

The invention is illustrated in accompanying drawings as follows: Figure 1 shows a central section through the stuffing box with the packing in place. Fig. 2 shows a fragment of a bar from which the packing rings are formed. Fig. 3 shows one of the metallic packing rings complete and bent to shape.

1 marks the rod, 2 the stuffing box, and 3 the gland. The bars 4 have the lips 5 which are adapted to overlap the edge of an opposing bar. Spaces 6 are arranged between the overlapping lips, the spaces being at least equal in length to the lips so that when two portions of the bar 4 are arranged side by side and opposingly faced the overlapping lips of one will enter the spaces 6 of the other, thus locking the two parts of the complete ring against rotation relatively to each other so that the joints such as 7 and 8 cannot be brought into register.

The complete ring formed by bending the

bars 4 and placing the two opposing portions side by side in the position shown in Fig. 3, is of triangular shape, in cross section, the outer surfaces 9 being preferably somewhat concave so as to better receive a round elastic packing 10.

It will be observed that single bars with the lips removed can be used at the end of the stuffing box, thus completing the metallic wearing surface throughout the length of the stuffing box.

With packing formed as shown, the bars 4 may be marketed in indefinite lengths so that it can be cut off to form rings of any diameter, and the halves break the joints so that with the elastic packing there is no danger of leakage past the rings. The interlocking prevents these joints from coming into register. In this way a metallic packing of practically universal application can be formed and readily applied.

What I claim as new is:

1. A rod packing comprising a malleable metallic ring adapted to assume a shape forming a cylindrical opening for rods of different diameters and having a beveled outer surface adapted to receive an elastic packing.

2. As an article of manufacture a triangularly shaped bar of malleable metal having interlocking portions thereon whereby two of said bars may be bent into the form of a ring with broken joints, and interlocked to maintain the interlocked position.

3. As an article of manufacture a triangularly shaped bar of malleable metal having interlocking portions thereon shaped to interlock with a portion of the same bar or a similar bar turned in the opposite direction, whereby two of said bars may be bent into the form of a ring and interlocked to maintain the interlocked position.

4. A rod packing made up of two bars of triangular shape in cross section and having interlocking means thereon, the said bars being arranged side by side and forming a complete ring of triangular shape in cross section and with broken joints, the parts being interlocked to maintain the broken joint.

5. A rod packing made up of two bars of triangular shape in cross section having overlapped lips with intervening spaces of at least the length of the lips whereby the bars may be arranged side by side, the lips of one extending into the spaces between the lips of the other, the two bars forming a

complete ring of triangular shape in cross section and with broken joints.

6. A rod packing comprising packing rings of malleable metal adapted to assume the shape of rods of different diameters and of triangular shape in cross section; and an elastic packing arranged between the rings on the beveled surfaces, the elastic packing extending outwardly beyond the outer periphery of the rings.

7. A rod packing comprising packing rings of malleable metal, said rings being axially divided, with broken joints between the parts, each part being of triangular

shape in cross section and forming a complete ring of triangular shape in cross section, the said parts being interlocked; and an elastic packing arranged between the rings on the beveled surfaces formed on the rings.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

EDWIN J. ARMSTRONG.

Witnesses:

H. C. LORD,
JAMES REED CRAIG.